

I688-I Medic Lane,
Ft. Myers, FL 33907
Tel: 941-278-3443
FAX 813-278-3550

Dr. Kharitonova T.V.
Russian A.L.Polenov
Neurosurgical Institute
12 Maykovsky str.,
191104 St.Petersburg, Russia
Tel: 298-07-40 (h), 273-80-84
FAX (812)275-56-03

THE ROLE OF OPIOID RECEPTORS IN REALIZATION OF PROLACTIN
FUNCTION OF ADENOHYPOPHYSIS IN NEUROONCOLOGICAL PATIENTS.

T.V.Kharitonova, A.N.Kondratyev, I.A.Savvina, V.P.Bersnev
Russian Polenov Neurosurgical Institute
12 Mayakovsky str., 191104, St.Petersburg, Russia

Induction anesthesia is the first stress-limiting moment of neurooncological operations. Nowadays the use of narcotic analgetics for brain tumor surgery is wide-spread paying attention to considerable prevalence of brainstem opioid receptors. We studied prolactin reactions in 28 neurooncological patients using radioimmunological method in order to determine the role of opioid receptors in the regulatory function of adenohypophysis. In the 1st group of patients fentanyl, mu-opioid receptor antagonist, was used. In the 2nd group butorphanol tartrat, kappa-opioid receptor agonist-antagonist, was used. The increase of prolactin was observed in the 1st group, not in the 2nd one. Our findings show different regulating role of mu- and kappa-opioid receptors in realization of neuroendocrinological reactions during induction anesthesia in neurooncological patients.

Kharitonova T.V.